

BUSINESS PROCESS I

STUDENT AID APPLICATION AND ELIGIBILITY DETERMINATION

SUMMARY: Under this process, ED provides the means for applicants to establish financial need and eligibility for federal student financial assistance. The results of the process are used throughout the delivery of financial aid, including schools' packaging of federal, state and institutional aid. Four key sub-processes support this critical application and eligibility process: application for financial aid, data matches with several federal agencies to verify fundamental applicant eligibility, calculation of the effective family contribution (EFC) to determine financial need, and reporting of the results of the process to applicants, schools or State agencies. In addition, applicants may correct or revise previously submitted data using this process.

Approximately 80 percent of the some 10 million annual student aid applicants choose to apply for financial aid using the paper application: the rest use one of ED's electronic processes: Free Application for Federal Student Aid (FAFSA) on the Web, FAFSA Express, or EDEXpress

BUSINESS PROCESS GOAL: To enable students to apply for federal and other types of financial aid. The goal is also to determine eligibility and calculate the expected family contribution (EFC) and to report the results to the applicant and, as authorized by the applicant, schools, State agencies and others.

BUSINESS PROCESS DESCRIPTION

1. Students apply for federal and other student aid (state and school-based) by completing the paper form of the FAFSA or the various electronic versions (EDEXpress, FAFSA Express, and FAFSA on the Web).
2. ED's Multiple Data Entry (MDE) contractor receives paper FAFSAs and corrections to FAFSAs. These are scanned in an automated process that captures data and an image of the application, which are transmitted electronically to the Central Processing System (CPS).
3. Electronic FAFSA applications are transmitted directly to the CPS.
4. The CPS matches applicant information against several data stores to determine if the applicant meets certain specified eligibility requirements (i.e., registered with the Selective Service, not in default on a federal student loan, etc.). The matches are conducted with :

- Department of Veterans Affairs (VA)
 - Immigration and Naturalization Service (INS)
 - Social Security Administration (SSA)
 - Selective Service System (SSS)
 - Department of Justice (DOJ)
 - National Student Loan Data System (NSLDS)
5. The CPS contains a variety of authentication and validation tests against applicant data to ensure that they are internally consistent and within normal ranges. If there are missing data elements or range violations, the CPS generates a request for corrections or additional information. In addition, the CPS randomly selects some applications for verification by the schools. In this process, information from the documents provided to the school by the student or parent is matched against the data on the application.
 6. The CPS calculates the EFC that is used to determine the student's need for financial aid.
 7. The application processing results are sent to the applicant via a paper report known as the Student Aid Report (SAR).
 8. Electronic transmissions of applicant data are sent to all eligible schools that the student indicated on the application. The electronic transmission file is commonly known as the Institutional Student Information Report (ISIR).

BUSINESS PROCESS CONTINUITY AND CONTINGENCY PLANS

PLAN A

Potential Failure: For the 1999-2000 award year, the MDE cannot provide data from paper FAFSAs to the CPS on January 3, 2000; for the 2000-2001 award year, the MDE cannot provide data from paper FAFSAs to the CPS January 17, 2000.

Mitigation Plans:

1. ED will encourage students (and schools to encourage their students) to apply for aid using electronic application methods (FAFSA on the Web and FAFSA Express).
2. ED will encourage students (and schools to encourage their students) to submit FAFSAs for the 1999-2000 award year prior to January 1, 2000.

Activities 1 and 2 will be done by sending a notice to all schools and posting to OSFA's Web site in fall 1999.

3. ED will expand the capacity of FAFSA on the Web (FOTW) and Renewal FAFSA on the Web (RFOTW) for the 1999-2000 and 2000-2001 award years to accommodate an increase in electronic applications.

Contingency Plan: In the event that paper applications cannot be processed by the Multiple Data Entry (MDE) contractor in the usual way, ED will immediately implement the Alternate Data Entry (ADE) process which is normally reserved for use during peak processing times. ED will assure sufficient ADE capacity to handle normal MDE volumes for 1999-2000 and 2000-2001.

Assumptions:

1. The Central Processing System (CPS) or the CPS contingency system will be available to process the data from the ADE and/or FOTW.
2. The communications infrastructure required to transmit data from the ADE and FOTW to CPS will be available.
3. In the event of a Y2K related electrical power failure at the MDE facility that cannot be within the failure tolerance thresholds listed later in this document, ED will implement the MDE Disaster Recovery Plan, which outlines the procedures for implementing MDE at the Disaster Recovery Site. (Copies of the Disaster Recovery can be obtained from the Systems Manager).
4. The projected number of 1999 – 2000 financial aid applications that will be processed in January 2000 is approximately 220,000 (55,000/week).
5. The projected number of 2000 – 2001 financial aid applications that will be processed in January 2000 is approximately 334,000 (172,000/week during the third and fourth weeks of January).
6. The projected number of 1999 – 2000 History Corrections that will be process in January 2000 is approximately 236,000 (59,000/week). (Projections are based upon the CPS statistics for January 1999.)
7. 1999 –2000 ADE system acceptance testing was successfully completed in January 1999.

For more information, see **DETAILED CONTINGENCY PLAN A.**

PLAN B

Potential Failure: The Central Processing System (CPS) cannot perform the eligibility matches with other agencies or the National Student Loan Data System (NSLDS) to determine eligibility for Title IV aid for the 1999-2000 award year on January 3, 2000; for the 2000-2001 award year, on January 17, 2000.

Mitigation Plan: ED will encourage students (and schools to encourage their students) to submit FAFSAs for the 1999-2000 award year prior to January 1, 2000. This will be done by sending a notice to all schools and posting to OSFA's Web site in fall 1999.

Contingency Plan: If there is a failure during the month of January 2000, ED will forego the data match(s) and continue to process the FAFSA and send ISIRs and SARs. When the system is repaired, ED will perform the data match(s) and resend the ISIRs and SARs.

Assumptions:

1. A correct EFC can be calculated by the CPS, FAFSA on the WEB, FAFSA Renewal on the Web, FAFSA Express or EDEExpress for 1999-2000 and 2000-2001.
2. A SAR or ISIR can be produced from a FAFSA product.
3. Verification edits are performed as usual.
4. The communications infrastructure required to transmit data from the ADE and FOTW to the CPS will be available.
5. Title IV assistance would not be denied based on a failure to confirm citizenship during the period of a Y2K failure. 668.33(c)(2)
6. Students who are required to register with the Selective Service would not be denied eligibility based on a failure to verify their registration with the Selective Service during the period of a Y2K failure. 668.37(b)
7. For 1999-2000 new awards in January 2000, a school may disburse funds from all programs without Financial Aid Transcript history, which would have been obtained from a match with NSLDS during the period of a Y2K failure. 668.19(a)

The plan to obtain the EFC, including data matches, is included **DETAILED CONTINGENCY PLAN C.**

PLAN C

Potential Failure: The CPS cannot calculate an EFC or cannot calculate a correct EFC for the 1999-2000 award year on January 3, 2000; for the 2000-2001 award year, on January 17, 2000.

Mitigation Plan: ED will encourage students (and schools to encourage their students) to apply for aid using electronic application methods (FAFSA on the Web and FAFSA Express) by fall 1999. This will be done by sending a notice to all schools and posting to OSFA's Web site in fall 1999.

- **1999-2000 AWARD YEAR:**

In its notice in fall 1999, ED will encourage students (and schools to encourage their students) to submit FAFSAs for the 1999-2000 award year prior to January 1, 2000.

- **1999-2000 and 2000-2001 Award Year:**

1. In its notice in fall 1999, ED will encourage schools to encourage students to apply for aid using FAFSA on the Web and Renewal FAFSA on the Web.
2. ED will develop and include an EFC calculator on all its electronic filing products (FAFSA on the Web, Renewal FAFSA on the Web, FAFSA Express and EDEExpress) in all of its 1999-2000 and 2000-2001 product releases.

Contingency Plan: ED will set the system clock back to 1998 to calculate a correct and official EFC and produce SARs and ISIRs. (The actual month and day of application will remain unchanged.) In addition, ED will provide estimated EFC software on its products to allow schools to package aid awards.

Assumptions:

1. The Title IV Wide Area Network (TIVWAN) will be able to transmit the Institutional Student Information Records (ISIRs) to the schools.
1. SARs will be mailed to students.
2. EDEExpress and custom financial aid software will be able to process the ISIRs generated by the CPS contingency system. (ED will conduct an integration test of the CPS contingency system and EDEExpress. ED will also invite on or more schools that use custom financial aid software to participate in the CPS contingency system test).
3. The CPS contingency system will be able execute the data matches with the Social Security Administration, the Immigration and Naturalization Service, the Veteran 's Administration, the Selective Service, and the National Student Loan Data System. (ED plans to test the data matches with the entities listed above during the CPS contingency system test. ED successfully performed a CPS Y2K integration test with the CPS matching agencies in February 1999).
4. In the event of a Y2K related electrical power failure at the Virtual Data Center (VDC) that cannot be within the failure tolerance thresholds listed in **Detailed Contingency Plan C**, ED will implement the CPS Disaster Recovery Plan, which outlines the procedures for implementing CPS at the Disaster Recovery Site. (Copies of the Disaster Recovery can be obtained from the Systems Manager).
5. The projected number of 1999 – 2000 financial aid applications that will be processed in January 2000 is approximately 220,000 (55,000/week). The projected number of 2000 – 2001 financial aid applications that will be processed in January 2000 is approximately 334,000 (172,000/week during the third and fourth weeks of January). Projections are based upon the CPS statistics for January 1999.

For more information see **DETAILED CONTINGENCY PLAN C**.

DETAILED CONTINGENCY PLAN A

This plan details the steps ED will take in the event that the Multiple Data Entry contractor (MDE) cannot provide data from paper form of the Free Application for Federal Student Aid (FAFSA) to the Central processing System (CPS) on

January 3, 2000, (for the 1999-2000 award year) or January 17, 2000, for the 2000-2001 award year.

Business Owner *(This is the name of the business process owner with implementation authority.)*

Director, Application and Pell Processing Systems Division (APPS)
U.S. Department of Education
ROB-3, Room 4636
7th and D Streets, SW
Washington, DC 20202

I. Prerequisites *(Activities that need to be completed on or before December 31, 1999, to implement the contingency.)*

1. ED will issue a TIVWAN contract modification to expand the capacity of FAFSA on the Web (FOTW) and Renewal FAFSA on the Web (RFOTW) to allow for the processing of all paper FAFSAs and History Corrections by June 11, 1999
2. NCS prepares the documentation and network messages to be sent to the Student Financial Assistance (SFA) community in the event the contingency is to be implemented in the fall 1999.
3. ED Application and Pell Processing System Division will approve documentation and network messages in fall 1999.
4. NCS will develop and test the expanded 1999 – 2000 FOTW and RFOTW in fall 1999.
5. NCS will develop and test the expanded 2000 – 20001 FOTW and RFOTW following the test of 1999-2000 FOTW and RFOTW.
6. ED will encourage schools to encourage students to apply for aid using FAFSA on the Web and Renewal FAFSA on the Web by sending a notice to all schools via an Action memo and posting to OSFA's Web site in fall 1999.
7. ED will encourage students to apply for aid using FAFSA on the Web and Renewal FAFSA on the Web by posting a message to the OSFA Web site in fall 1999.
8. For 1999-2000, ED will encourage schools to encourage students to apply for aid prior to January 1, 2000 by sending a notice to all schools via an Action memo and posting to OSFA's Web site in fall 1999.
9. For 1999-2000, ED will remind schools of the availability of the EFC calculator on its current electronic product and inform them of the availability on all the products to be released for the 2000-2001 award year by sending a notice to all schools via an Action memo and posting to OSFA's Web site in fall 1999.

II. Zero-Day Strategy *(In some instances it may be possible to minimize the risk of failure. The zero day strategy provides for risk reduction*

activities such as shutting down non-essential dependent processes to protect the critical process.)

Detailed information about the Day One Plan and Zero Day Strategy is maintained by OSFA's Application and Pell Processing System Division, Program System Services (PSS) as part of their Y2K preparation.

III. Trigger Criteria *(The criteria define the instance of failure, time required to initiate the contingency plan, and the time required to conduct other trigger activities.)*

Trigger *(A trigger is an event or chain of events that signals the need to implement the contingency plan.)*

The MDE cannot provide data from paper 1999-2000 FAFSAs on January 3, 2000. The MDE cannot provide data from paper 2000-2001 FAFSAs on January 17, 2000.

System Monitoring *(Ongoing systems review process.)*

CPS Operations Manager and the production control staff will monitor the MDE data transmissions to CPS, and report any data transmission problems to the Systems Manager.

Response Procedure *(Procedures for notifying responsible parties of system failures.)*

The following is a list of procedures to follow to notify ED of system failure.

1. The MDE Operations Manager will notify the MDE program manager and the MDE COTR.
2. The MDE COTR will notify the APPS division director (Business Owner), and the Systems Manager.
3. The MDE Program Manager will provide the system repair plan to the ED MDE COTR and the Systems Manager.
4. The COTR will request authorization to implement the system repair from the Business Owner.
5. The MDE Program Manager will advise the MDE Operations Manager.

Event Monitoring *(Parties responsible for overseeing system repairs.)*

The following is a list of activities that will be performed by the MDE Program Manager, the MDE Operations Manager and the Quality Assurance/Quality Control (QA/QC) staff to monitor the progress of the system repair.

1. The MDE Operations Manager, MDE Program Manager, QA/QC staff and testing staff will review the data files that are transmitted to CPS daily.
2. The Operations Manager, Program Manager, and QA/QC staff will confer with the Systems Manager for progress updates daily.
3. The Operations Manager, Program Manager, and QA/QC staff will review the system modification, as appropriate, on a daily basis.
4. After the system repair has been verified by testing, the Business Owner will approve the use of the repaired system to enter FAFSA data.

Failure Tolerance Threshold (*The time ED will allow for system repairs to be completed before implementing the contingency plan.*)

The Failure Tolerance Threshold for this process is January 24, 2000, for the 1999-2000 award year and January 24, 2000, for the 2000-2001 award year.

Implementation Timeframe (*The time it will take to implement the contingency plan.*)

Once the failure has been determined, the contingency plan can be activated immediately. The ADE implementation plan calls for the ADE to be fully staffed within three weeks and operating at full capacity within six weeks.

The ADE large volume implementation time frames are as follows: Additional information is contained in the ADE Implementation Plan that can be obtained from the Systems Manager.

Scheduled Volume	Applications Weekly	History Corrections Weekly
Week 1	9,941	10,423
Week 2	29,822	31,269
Week 3	127,242	64,222
Week 4	159,053	64,222
Week 5	187,653	64,222

Week 6	187,653	64,222

Go No-Go Decision Point (*The last day by which the Business Owner must decide whether to proceed with the plan so that it can be implemented on the next after the Failure Tolerance Threshold.*)

If MDE cannot provide data from paper 1999-2000 FAFSAs on January 3, 2000, the decision to implement the plan will be made on January 3, 2000. The contingency plan will be implemented by January 24, 2000. If MDE cannot provide data from paper 2000-2001 FAFSAs on January 17, 2000, the contingency plan will be implemented on January 24, 2000. The business owner will decide whether to implement the plan will be made by January 17, 2000.

Notification Procedures (*The actions ED will take to inform customers and partners of the system failure and the contingency plan requirements.*)

Once the failure has been determined, Education will perform the following actions to communicate the failure to the SFA community.

1. The Business Owner will notify the Education Customer Service that the contingency plan is being implemented.
2. The Systems Manager will provide ED Customer Service with approved materials from NCS regarding the contingency plan implementation.
3. ED Customer Service will use the information provided by NCS to communicate the failure and contingency plan to the SFA community.

IV. Business Resumption Team (*Identify and list the roles and responsibilities of the persons involved in implementing the contingency plan.*)

Business Owner, Director APPS
U.S. Department of Education

Manage the overall activities associated with implementing the contingency plan and has the authority to commit Education resources and is also has the following responsibilities:

- *Determine that a system failure has occurred.*
- *Authorize the initiation of the contingency plan implementation.*
- *Authorize the implementation of the system repair.*

Systems Manager
U.S. Department of Education

Monitor the implementation of the contingency plan and the system repair and has the following responsibilities:

- Notify CSC (Meriden, CT) of the system failure.
- Monitor the contingency plan implementation.
- Monitor the progress of the system repair.
- Advise the Business Owner of the progress of the system repair.
- Provide ED Customer Service the materials prepared by NCS to communicate to the SFA community.
- Direct PIC regarding inquiries on the implementation of the contingency plan.

Technical Liaison
U. S. Department of Education

Serve as the technical liaison to the other Title IV systems located in the Student Financial Aid Data, as well as ED and CSC contract personnel.

Director, Programs Systems Service (PSS)
U.S. Department of Education

Manage the overall activities associated with the operation of all Title IV Financial Aid Systems.

MDE COTR
U.S. Department of Education

Responsible for notifying ED's Customer Service of the system failure and the implementation of the contingency plan. also has the following responsibilities:

- *Monitor the progress of the system repair.*
- *Monitor the implementation of the contingency plan.*
- *Provide ED Customer Service the materials prepared by NCS to communicate to the SFA community.*

CPS COTR
U.S. Department of Education

Responsible for coordinating contractual issues regarding the implementation of the contingency plan.

Systems Security Officer, MDE/ADE
U.S. Department of Education

Ensure that the MDE/ADE security standards are maintained during the repair of the MDE and/or the activation of the ADE.

MDE Program Manager, ACT
American College Testing
2100 ACT Circle
Iowa City, Iowa 52243-0168

Responsible for notifying the Business Owner of the system failure. Also has the responsibility of coordinating the system repair activities of ACT.

MDE Operations Manager, ACT
American College Testing
2100 ACT Circle
Iowa City, Iowa 52243-0168

Responsible for production control and system operations during the system repair. Also responsible for conducting quality control activities for of the first live production after system repair.

CPS Program Manager
National Computer Systems
2510 N. Dodge St., PO Box 30
Iowa City, Iowa 52244

Responsible for allocating NCS resources in the implementation of the contingency plan.

Software Project Manager
National Computer Systems
2510 N. Dodge St., PO Box 30
Iowa City, Iowa 52244

Responsible for directing the activities of the team responsible for writing program code and testing for implementation of the contingency and the repair of the system failure.

CPS Operations Manager
National Computer Systems
2510 N. Dodge St., PO Box 30
Iowa City, Iowa 52244

Responsible for production control and system operations after implementation of the contingency plans. Also responsible for the conducting a quality control activities for of the first live production following implementation of the contingency plan.

ADE Project Manager
National Computer Systems
2510 N. Dodge St., PO Box 30
Iowa City, Iowa 52244

Responsible for the implementation and operation of the ADE. Her responsibilities are documented in the ADE Implementation Plan and include:

- *Maintain, monitor, and implement the project schedule*
- *Monitor ADE system development*
- *Design and develop processing and archival procedures*
- *Design and develop a data entry/data verify plan*
- *Prepare, monitor, and implement a facility/facilities plan*
- *Prepare, monitor, and implement an equipment/materials plan*
- *Prepare, monitor, and implement a staffing plan*
- *Analyze and procure data entry subcontractors*
- *Prepare project start-up and shutdown plans*
- *Coordinate and monitor multiple sites' operations*

CSC Project Manager
Computer Science Corporation (CSC) – Meriden
71 Deerfield Lane
Meriden, CT 06450

Responsible for CSC contractor staff at VDC and for the allocating and managing CSC resources to meet ED requirements.

V. Sequence of Required Activities *(The activities that the Business Resumption Team will carry out in support of the contingency plan and after the Business Owner decides to implement the contingency plan.)*

1. ED informs National Computer System (NCS) to activate the 1999-2000 release of the ADE to perform entry of Free Application for Federal Student Aid (FAFSA) data, and specifies the large volume option from the ADE Implementation plan for Option year 3 of the Central Processing System contract on January 3, 2000.
2. APPS Division of ED notifies ED Customer Service of the implementation of the contingency plan on January 4. ED Customer Service will have

- responsibility for notifying the SFA community and internal ED staff of the contingency plan implementation.
3. NCS program management (Iowa City, Iowa) will notify CPS Production Control of the implementation of the contingency plan, and to cease scheduling any more production jobs as of January 4.
 4. NCS program management (Iowa City, Iowa) will notify CPS Customer Service in Iowa City of the implementation of the contingency plan on January 4.
 5. The COTR for CPS will inform the CSC Project Manager of the requirement to activate the ADE January 4.
 6. NCS will activate the 1999-2000 and 2000-2001 ADE systems January 4.
 7. NCS production control staff will schedule the ADE transmissions January 4.
 8. NCS Quality Assurance staffs and a team of reviewers will review the first live output before transmission to the CPS January 5.
 9. American College Testing (ACT) will repair and the MDE system and notify the Systems Manager when the repairs and system testing are completed. The Systems Manager will inform the business owner of the system repair.
 10. The business owner will approve the repaired MDE system for entry of applicant data.

VI. Testing Plan *(The activities ED will carry out before December 31, 1999, to test the contingency plan.)*

1. Test Approach/Objectives

The ADE system will be fully tested using the CPS structured testing approach as described in the CPS System Test Plan and in the ADE Implementation Plan to ensure it meets ED's requirements for entry of applicant data. These plans can be obtained from the Systems Manager. NCS successfully conducted 1999 – 2000 ADE system acceptance testing in January 1999.

2. Required Resources

- a. NCS Software Project Manager and Software Development Team
- b. Macro Test Team
- c. DASD in the ADE test environment
- d. Communication line to CPS
- e. NCS Production Control Team
- f. NCS Operations team
- g. Workstations
- h. Tape Drives

3. Personnel

See Business Resumption Team.

4. Schedules and Locations

The testing of the 1999-2000 ADE was completed in January 1999. The 2000-2001 ADE testing will occur with the preparation of the 2000-2001 release in November 1999. Testing will take place in Iowa City, Calverton, MD, Lawrence KS, and in Meriden CT.

5. Test Procedures

The ADE system will be fully tested using the CPS structured testing approach as described in the CPS System Test Plan and in the ADE Implementation Plan to ensure it meets ED's requirements for entry of applicant data. These plans can be obtained from the Systems Manager.

6. Expected Results and Exit Criteria

The results of the process test cases will be checked for accuracy. The test will be considered complete when ED is assured that the system is accurate and meets ED's data entry requirement and the CPS receives the data as if it had been provided through the regular MDE process. Additional information can be found in the ADE Test Plan. The plan can be obtained from the Systems Manager.

DETAILED CONTINGENCY PLAN C

This plan details the steps ED will take in the event that Central Processing System (CPS) cannot calculate an Estimated Family Contribution (EFC) or cannot calculate a correct EFC for the 1999-2000 award year on January 3, 2000, or for the 2000-2001 award year on January 17, 2000.

Business Owner (*This is the name of the business process owner with implementation authority.*)

Director, Application and Pell Processing Systems Division
U.S. Department of Education
ROB-3, Room 4636
7th and D Streets, SW
Washington, DC 20202

I. Prerequisites (Activities that need to be completed on or before December 31, 1999, to implement the contingency.)

1. ED will issue a Statement of Work (SOW) in June 1999 to NCS to modify the CPS to disable all data edits for prior year edit, and change all date parameters in order to run in the calendar year 1998.
2. NCS modifies and tests the system according to the SOW specifications and the timelines by September 30, 1999 for 1999-2000, and by January 10, 2000 for 2000-2001.
3. NCS prepares the documentation and network messages to be sent to the Student Financial Assistance (SFA) community in September, 1999.
4. ED APPS Division approves the documentation and network messages to be sent to the SFA community in the event that the contingency is to be implemented by September 30, 1999.
5. ED has issued a task order to add EFC calculation to FAFSA Express for the 1999 – 2000 and 2000 – 2001 award years by summer 1999..
6. NCS will complete task order to add EFC calculation to the 1999 -2000 FAFSA Express by September 30, 1999 and to the 2000 - 2001 FAFSA Express by December 17, 2000.

II. Zero-Day Strategy *(In some instances it may be possible to minimize the risk of failure. The zero day strategy provides for risk reduction activities such as shutting down non-essential dependent processes to protect the critical process.)*

Detailed information about the Day One Plan and Zero Day Strategy is maintained by OSFA's Application and Pell Processing System Division, Program System Services (PSS) as part of their Y2K preparation.

III. Trigger Criteria *(The criteria define the instance of failure, time required to initiate the contingency plan, and the time required to conduct other trigger activities.)*

Trigger *(A trigger is an event or chain of events that signals the need to implement the contingency plan.)*

CPS cannot calculate an Estimated Family Contribution (EFC) for the 1999-2000 award year on January 3, 2000. CPS cannot calculate an EFC for the 2000-2001 award year on January 17, 2000.

System Monitoring *(Ongoing systems review process.)*

CPS Operations Manager and the production control staff will monitor the system activities.

NCS production control staff and CSC (Meriden, CT) computer operators will monitor the system on an ongoing basis. The monitoring entails review of control applications, job completion reports and process control system.

This monitoring includes review of the accuracy of the EFC calculations, which are being produced.

Response Procedure *(Procedures for notifying responsible parties of system failures.)*

The following are a list of procedures to follow to notify ED of system failure.

1. The CPS Operations Manager will notify the CPS program manager and the CPS COTR.
2. The CPS COTR will notify the APPS division director (Business Owner) and the Systems Manager.
3. The CPS Program Manager will validate the system repair plan with the ED CPS COTR and the CSC Data Center Manager.
4. The COTR will request authorization to implement the system repair from the Business Owner.
5. The CPS Program Manager will advise the CPS Operations Manager and the CSC Data Center Manager.

Event Monitoring *(Parties responsible for overseeing system repairs.)*

The following is a list of activities that will be performed by the CPS Program Manager, the CPS Software Project Manager and the QA/QC staff to monitor the progress of the system repair.

1. The CPS Software Project Manager, CPS Program Manager, QA/QC staff and testing staff will review system output daily.
2. The Operations Manager, CPS Program Manager, and QA/QC staff will confer with CSC in Meriden, CT for progress updates daily.
3. The Operations Manager, CPS Program Manager, and QA/QC staff will review the system modification, as appropriate, on a daily basis.

Failure Tolerance Threshold *(The time ED will allow for system repairs to be completed before implementing the contingency plan.)*

The Failure Tolerance Threshold is January 17, 2000, for the 1999-2000 school year and January 2000 for the 2000-2001 award year.

Implementation Timeframe *(The time it will take to implement the contingency plan.)*

Once the failure has been determined, NCS will implement the contingency plan within 5 working days of receiving notification from ED to implement the contingency plan.

Go No-Go Decision Point (*The last day by which the Business Owner must decide whether to proceed with the plan so that it can be implemented on the next after the Failure Tolerance Threshold.*)

If CPS cannot calculate an EFC for 1999-2000 applications on January 3, 2000, the contingency plan will be implemented on January 10, 2000 (the fifth business day after the failure). The decision to implement the plan will be made by January 9, 2000. If CPS cannot calculate an EFC for 2000-2001 applications on January 24, 2000, the contingency plan will be implemented on January 28, 2000. The decision to implement the plan will be made by January 24, 2000 (the fifth business day after the failure).

Notification Procedures (*The actions ED will take to inform customers and partners of the system failure and the contingency plan requirements.*)

Once the failure has been determined, Education will perform the following actions to communicate the failure to the SFA community.

1. The Business Owner will notify the Education Customer Service that the contingency plan is being implemented.
2. The Systems Manager will provide ED Customer Service with approved materials from NCS/CSC regarding the contingency plan implementation.
3. ED Customer Service will use the information provided by NCS to communicate the failure and contingency plan to the SFA community.

IV. Business Resumption Team (*Identify and list the roles and responsibilities of the persons involved in implementing the contingency plan.*)

Director, APPS
U.S. Department of Education

Manage the overall activities associated with implementing the contingency plan and has the authority to commit Education resources. Also has the following responsibilities:

- *Determine that a system failure has occurred.*
- *Authorize the initiation of the contingency plan implementation.*
- *Authorize the implementation of the system repair.*

Director, Programs Systems Service (PSS)
U.S. Department of Education

Manage the overall activities associated with the operation of all Title IV Financial Aid Systems.

Systems Manager
U.S. Department of Education

Monitor the implementation of the contingency plan and the system repair. Also responsible for notifying ED's Customer Support Branch of the system failure and the implementation of the contingency plan and also has the following responsibilities:

- Notify CSC (Meriden, CT) of the system failure.
- Monitor the contingency plan implementation.
- Monitor the progress of the system repair.
- Advise the Business Owner of the progress of the system repair.
- Provide ED's Customer Support Branch with the materials prepared by NCS to communicate to the higher education community.
- Direct the Public Inquiry Contractor regarding inquiries on the implementation of the contingency plan.

CPS COTR
U.S. Department of Education

Responsible for:

- *Approves NCS Task Order proposal*
- *Monitors the progress of the system repair.*
- *Monitors the implementation of the contingency plan.*

Technical Liaison
U. S. Department of Education

Serve as the technical liaison to the other Title IV systems located in the Student Financial Aid Systems, as well as ED and CSC contract and operations personnel.

Systems Security Officer, CPS
Department of Education

Ensure that the CPS security standards are maintained during the repair of the CPS, and/or the implementation of the CPS contingency system.

Processing System Program Manager
National Computer Systems
2510 N. Dodge St., PO Box 30

Iowa City, Iowa 52244

Responsible for notifying the Business Owner of the system failure. Also has the responsibility of coordinating the activities of NCS and CSC as defined in the Task Order.

CPS Program Manager
National Computer Systems
2510 N. Dodge St., PO Box 30
Iowa City, Iowa 52244

Responsible for allocating NCS resources in the implementation of the contingency plan.

Software Project Manager
National Computer Systems
2510 N. Dodge St., PO Box 30
Iowa City, Iowa 52244

Responsible for directing the activities of the team responsible for writing program code and testing for implementation of the contingency and the repair of the system failure.

CPS Operations Manager
National Computer Systems
2510 N. Dodge St., PO Box 30
Iowa City, Iowa 52244

Responsible for production control and system operations after implementation of the contingency plans and is also responsible for the conducting a quality control activities for of the first live production following implementation of the contingency plan

CSC Project Manager
Computer Science Corporation (CSC) – Meriden
71 Deerfield Lane
Meriden, CT 06450

Responsible for CSC contractor staff at VDC and responsible for the allocating and managing CSC resources to meet ED requirements.

Operations Manager
CSC – Meriden
71 Deerfield Lane
Meriden, CT 06450.

Responsible for monitoring mainframe activities and contingency plan implementation and the system repair.

V. Sequence of Required Activities *(The activities that the Business Resumption Team will carry out in support of the contingency plan and after the Business Owner decides to implement the contingency plan.)*

1. APPS Division of ED notifies ED's Customer Service of the implementation of the contingency plan on January 10 (1999-2000 failure) or January 24 (2000-2001 failure).
2. ED Customer Service will have responsibility for notifying the SFA community and internal ED staff of the contingency plan implementation January 10 or January 24, depending on the scope of the failure.
3. NCS program management (Iowa City, Iowa) will notify CPS Production Control of the implementation of the contingency plan, and to cease scheduling any more production jobs January 10 (1999-2000 failure) or January 24 (2000-2001 failure).
4. NCS program management (Iowa City, Iowa) will notify CPS Customer Service in Iowa City of the implementation of the contingency plan January 10 (1999-2000 failure) or January 24 (2000-2001 failure).
5. The Systems Manager will notify CSC in Meriden, CT of the implementation of the contingency plan.
6. NCS ceases all production runs.
7. NCS production control will work with CSC operations staff to back up the entire CPS database for all active cycles.
8. CSC Operations will change the system clock to the date year 1998 beginning January 10 for the 1999-2000 award year and January 28 for the 2000-2001 award year. (The actual month and day will be used; only the date year will be changed.)
9. NCS development staff will implement the system changes necessary to make the date change compatible with the applications
10. Macro, the CPS testing subcontractor, will validate that the contingency system operates according to specifications.
11. NCS production control staff will schedule the contingency production jobs.
12. NCS Quality Assurance staff and a team of reviewers will review the first live output before first transmission January
13. After the cause of the Y2K failure is identified and remedied, the NCS software development team will implement and test the appropriate release of the CPS.
14. The Macro Test Team will regression test this release of the software.
15. NCS production control staff will schedule the corrected production jobs.
16. NCS Quality Assurance staff and a team of reviewers will review the first live output before transmission.

V. Testing Plan (*The activities ED will carry out before December 31, 1999, to test the contingency plan.*)

1. Test Objectives

The plan will test these objectives for the 1999 – 2000 and 2000 – 2001 award year systems:

- a) Verification that all date edits and date parameters will work with the system clock set to a date in 1998.
- b) Verification that the entire CPS will work with the repaired edits and the clock set back to 1998.
- c) Verification that EFCs are correctly calculated.
- d) Data exchanges with the NSLDS, SSA, Selective Service, INS, and VA are performed correctly.
- e) Records are selected for verification according to specifications.
- f) All system outputs are exactly as they were before the edits were changed.

2. Test Approach

The following is a list of the test areas with a brief description of the approach to successfully test these areas. A problem log will be maintained to document all discrepancies. This test will simulate the actual steps the user would take to complete an entire cycle of functions. The documentation will provide all the test cases and expected results.

<i>Test Item</i>	<i>Criteria</i>
<i>Develop Test Cases</i>	Macro will develop test cases for this phase of testing that are Y2K specific.
<i>Regression testing</i>	NCS will test for the “No Regression” condition; that is, the modified program performs the same way as the unmodified program.
<i>Edits</i>	Testing will ensure that editing is occurring, the format is correct and information displayed is correct.
<i>Matches</i>	Testing will take place that will ensure that the data exchanges with the NSLDS, SSA, Selective Service, INS, and VA will be performed correctly.
<i>Subsystem Testing</i>	Standard sub-system testing will begin after the development for new functional requirements. Test cases must be generated to validate repaired date edits.

<i>System Testing</i>	Standard system testing will begin after the completion of sub-system tests. The system tests run the full range of system functionality.
<i>SARS and ISIRS</i>	SARS and ISIRS will be produced and tested for a full range of institutions and situations.
<i>Integration Testing</i>	The final phase of system is the integration test, which tests the interaction between all of the separate components of the system. Because of its importance, Y2K specific test cases will be added during integration testing also.

3. Required Resources

The execution of the test will require the following resources:

- a. NCS Software Project Manager and Software Development Team
- b. Macro Test Team
- c. DASD in the CSC CPS test environment (Meriden, CT)
- d. Communication line (NCS Iowa City, IA/CSC Meriden, CT)
- e. NCS Production Control Team
- f. CSC Operations team
- g. Workstations at CSC and Iowa City, Iowa
- h. Working tape drives at Meriden VDC (Meriden, CT)

4. Personnel

See Business Resumption Team.

5. Schedules and Locations

The 1999 – 2000 CPS contingency system will be tested in August 1999. The 2000 – 2001 CPS contingency system will be tested in September 1999. The testing location(s) will include CSC – Meriden, CT, NCS – Iowa City, IA, and Macro International – Calverton, MD.

6. Test Procedures

NCS will provide a detailed test plan to be approved by ED by August 30, 1999.

7. Expected Results and Exit Criteria

The test case results produced will be compared to those obtained from the production system for each cycle. The test will be considered successful when the all computed results on the test cases match the

computed results from the production run of those test cases and the EFC calculations and data matches which result are the same as if the CPS clock had not been set back.